

## California Biosolids Trends in 2012

All values expressed in dry metric tons, 100% dry weight basis.

Biosolids generated:	680,000		
Use or disposal*			
Land application:	369,000		
	Class A**:	233,000	
		Compost***:	165,000
			In CA: 145,000
			In AZ: 17,100
			In NV: 1,300
		Thermophilic dig:	48,000
		Heat dried:	11,000
		Air dried, Alt 4:	4,000
		Lime treatment, Alt 3:	5,000
		ATAD:	200
	Class B:	136,000	
			In CA: 65,000
			In AZ: 70,000
			In NV: 1,000
Landfill:	220,000		In CA: 218,700
	ADC	154,000	In AZ: 1,000
	Filled:	66,000	In NV: 300
Surface Disposal:	20,000		
Incinerated:	19,000		
Fuel for cement kilns:	17,000		
Deep well injection:	10,000		
Stored	93,000		
		From current year:	25,000
		From previous years:	68,000
In long-term treatment (lagoons, etc.)	35,000***		

Major counties of generation:

Los Angeles:	190,000
Orange:	58,000
Santa Clara:	54,000
San Diego:	45,000
Riverside:	34,000
Alameda:	33,000
San Bernardino:	30,000
Sacramento:	23,000
Contra Costa:	23,000
Fresno:	19,000

Major counties of land application of California biosolids (not including finished compost):

	Total	Class B	Class A
Yuma, AZ:	71,000	70,000	1,000
Kern	62,000	9,000	53,000
Merced	32,000	29,000	3,000
Sacramento	22,000	19,000	3,000
Sonoma	9,000	9,000	----
Solano	7,000	7,000	----

Major counties receiving California biosolids for composting:

Kern:	88,000
San Bernardino:	39,000
La Paz, AZ	18,000
Merced:	12,000
Santa Barbara:	4,000

Major counties receiving biosolids at landfills:

Santa Clara:	68,000
Los Angeles:	42,000
Solano	29,000
San Diego	23,000
Alameda:	15,000
Ventura:	14,000

Notes:

\*The tonnages used and disposed are different from tonnages generated because many small and medium sized treatment POTWs store biosolids for several years prior to using or disposing all at once, or clean out lagoons every several years. Also, some POTWs calculate “generation” as

what is coming out of the digester, but then scoop up a lot of sand while removing biosolids from drying beds.

**\*\***Many small and medium sized POTWs in the Central Valley, Imperial County, and Riverside County air dry their biosolids to > 90% solids, and could probably demonstrate Class A using Alternative 4 (testing for three categories of pathogens); however in 2012 they chose options where they only had to demonstrate Class B. About 9,000 tons of the biosolids being applied as “Class B” in Merced County are probably “Class A”.

**\*\*\*** The tonnage given here is the tonnage of biosolids delivered by POTWs to the compost operations. The tonnage of compost produced from this could either be larger or smaller, depending on the amount of bulking agents (greenwaste, foodwastes, etc.) added, and how much organic matter is volatilized off during composting and curing.

**\*\*\*\***Tonnages in long term treatment represent the solids collected in 2012 and undergoing treatment in lagoons, drying beds, etc. These are very rough estimates, based on the POTW’s size, and represent the current year’s estimated production only (the POTW may have several years’ worth in lagoons that haven’t been dredged in some time. The solids continue to break down over the years). Cumulative tonnages in storage are also fairly rough estimates.

Other notes:

These figures do not include tertiary treatment sludge. This sludge has some of the same properties and some different properties than sludge produced from primary and secondary processes.

In 2012, two large regional facilities, the Honey Bucket Farms lime treatment/land application operation in Kern County and the EnerTech Slurry Carb / heat dryer in San Bernardino County terminated operations. Two new regional operations started up: Nursery Products Compost in San Bernardino County began composting, and Holloway Landfill in Kern County, which was previously permitted for landfilling other materials, began receiving biosolids.